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Appl. No. 10/706,375

Docket No. 9098

Amdt. dated February 6, 2007

Reply to Office Action mailed on September 7, 2006

Customer No. 27752

REMARKS

Claim Status

Claims 1 – 9 and 18 – 22 are pending in the present application. No additional claims fee is believed to be due. Claims 1 – 9 have been withdrawn as a result of an earlier restriction requirement. Claims 18 – 22 have been rejected under 35 U.S.C. §§ 112, 102 and 103.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 18 – 22 are rejected under 35 U.S.C. § 112, Second Paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Office Action states that it is unclear as to what the valleys and land areas are in Claim 18.

Figure 1 illustrates a plan view of one embodiment of a forming screen comprising an upper mesh member which comprises interwoven wires, 40 and 50, and an underlying mesh member which comprises interwoven wires, 60 and 70. Figure 6 is an illustration of one possible apparatus 400 for forming a molded, textured, spunlaced, nonwoven web 420 which comprises the forming screen 430, and a hydroentanglement means 440. The hydroentanglement means may utilize a liquid, such as water, to contact the fibrous substrate preform 410, which is in contact with the forming screen 430, at a junction 450 to produce the molded, textured, spunlaced, nonwoven web 420. One of ordinary skill in the art will readily recognize that as the liquid of the hydroentanglement means contacts the fibrous substrate preform, portions of the fibrous substrate preform will be forced between the interwoven wires of the upper mesh member and portions of the fibrous substrate preform will be held in place by the interwoven wires of the upper mesh member at the locations where those interwoven wires intersect. One of ordinary skill in the art will readily recognize that the portions of the fibrous substrate preform that are between the interwoven wires will be land areas and the portions of the fibrous substrate preform that are held in place at the intersection of the interwoven wires will be the interconnected valley areas. Figure 9 is an idealized side view of a molded, textured, spunlaced, nonwoven web in which the lowered portions of the upper layer of the nonwoven web are the valleys and the raised portions are the land areas. As Figure 9 is a

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side view and, therefore, a cross-section view, only a single image of a pattern of the land and valley areas is visible. One of ordinary skill in the art will readily realize, by viewing the figures of possible embodiments of a forming screen, possible apparatus for forming a molded, textured, spunlaced, nonwoven web, and images of a molded, textured, spunlaced, nonwoven web, that "a pattern of valleys and land areas such that said valleys between said land areas are interconnected" may be formed as claimed. If the claims "reasonably apprise those skilled in the art of the scope of the invention, [35 U.S.C.] § 112 demands no more." *Marley Mouldings Ltd. v. Mikron Industries Inc.*, 75 U.S.P.Q.2d 1954, 1956, 1957 (Fed. Cir. 2005).

Applicants respectfully request reconsideration and withdrawal of the rejection.

Rejections Under 35 U.S.C. §§ 102 and 103 Over Trokhan

Claims 18 – 22 have been rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over, Trokhan et al. (U.S. Patent No. 5,895,623)("Trokhan"). Applicants respectfully traverse these rejections.

Claim 18 is directed to a molded, textured, spunlaced, nonwoven web comprising fibers having an average length of from about 10 mm to about 60 mm, wherein said web having a surface comprising a pattern of valleys and land areas such that said valleys between said land areas are interconnected and each of said valley areas having a surface area of from about 0.1mm² to about 8mm². As noted above, the land areas of the molded, textured, spunlaced, nonwoven web are those portions of the fibrous substrate preform that are pushed between the interwoven wires of the upper mesh member and the valley areas are those portions of the fibrous substrate preform that are held in place by the interwoven wires.

Trokhan is directed to:

[a] method of forming apertured webs is provided comprising the steps of:
(a) forming a foraminous member comprising gross foramina and fine foramina wherein the gross foramina define a patterned design superimposed on the fine foramina by means of applying and curing a photosensitive resin onto a foraminous element comprising fine foramina in order to form elevated portions on the fine foramina defining the gross foramina, (b) providing a layer of fibers on said foraminous member; and
(c) applying fluid streams to said layer of fibers such that the fibers are

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randomly entangled in regions interconnected by fibers extending between adjacent entangled regions in a pattern determined by the pattern of gross foramina of the foraminous member to form an apertured web.

Abstract. Trokhan, however, does not teach each and every element of the claims and therefore does not anticipate the claims.

The foraminous member of Trokhan comprises gross and fine foramina. A photosensitive resin is applied to the foraminous member at a thickness selected to produce solid projections of a desired height on the foraminous member and thus define the gross foramina. "Specifically, the open areas of the gross foramina are those areas on which fibers are consolidated and entangled in the course of the hydroentanglement process. The solid projections which define the gross foramina therefore correspond to the apertures of the nonwoven webs." Col. 6, lines 28 – 32. "If the projections of the foraminous member are too short, the resulting apertures may lack cleanliness, that is, the apertures may have fibers crossing over them." Col. 7, lines 45 – 48. As such, the apertures of Trokhan provide for areas of the web over which very few, if any at all, fibers extend.

The Office Action puts forth that the apertures of Trokhan read upon the land areas of the current application since "there would at least be a few fibers therein in order to form the land area as recited." The apertures of Trokhan, however, are not the equivalent of the land areas of the current application. "During hydroentanglement, the fibers advance downwardly toward the surface 27 of the foraminous element 33 between the projections 10." Col 11, lines 51 – 53. Thus, as may be seen in Figures 2 and 3 of Trokhan, the surface 27 of the foraminous member 33 is defined by the fine foramina and during the hydroentanglement process, the fibers are consolidating on the surface of the foraminous member in-between the projections. Trokhan utilizes a hydroentanglement process in that a liquid, such as water, contacts a fibrous substrate that is in contact with a forming screen and forces the substrate down onto the forming screen. The resulting structure, however, is different from the resulting structure of the current application.

In Trokhan, the resulting structure is a single layer of consolidated fibers and, therefore, an interconnected land area, comprising apertures that correspond in location to the placement of the projections. Figure 5 of Trokhan illustrates a photomicrograph depicting an apertured web. The apertures (the dark spots) are, in effect, "holes" in the

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web as few fibers, if any, cross over those areas. In the current application, the resultant nonwoven web comprises land areas and interconnected valley areas. Figure 14 is a readily comparable photograph to that provided in Trokhan. The fibers of the current application are displaced during the molding process to create a pattern of undulations in the fibrous structure (as visible in Figure 14), however, the fibers are not displaced to the extent that holes are formed.

The Office Action is attempting to equate Trokhan's clean apertures (i.e., apertures with few or no fibers crossing them) to the land areas of the current application. Such an equation would also require the interconnected land areas of Trokhan to be the equivalent of the interconnected valley areas of the current application. Assuming *arguendo* that the interconnected land areas of Trokhan may equate to the interconnected valley areas of the current application, the apertures of Trokhan cannot equate to the land areas of the current application as that is not a possible result of the hydroentanglement process. One of ordinary skill in the art will readily realize that the projections of the foraminous member of Trokhan face the hydroentanglement means during the hydroentanglement process. As such, the fibers are able to "advance downwardly toward the surface 27 of the foraminous element 33 between the projections 10." Col 11, lines 51 – 53. In order for the apertures of Trokhan to truly equate to the land areas of the current application, as the Office is attempting to do by stating that "the apertures have few fibers extending there over. Therefore, the examiner deems this to read upon applicants' land region as recited since there would at least be a few fibers therein in order to form the land area as recited," the projections of the foraminous member of Trokhan would have to be different than Trokhan currently teaches. The projections would have to be hollow (as opposed to the formed solid photosynthetic resin), would have to be on the opposite side of the foraminous member (as opposed to on the top surface), and would have to face away from the hydroentanglement means during the hydroentanglement process (as opposed to facing towards the hydroentanglement means). Only a hollow projection on the bottom surface would allow for fibers to consolidate on the interior of the projection during hydroentanglement to form a land area such as claimed in the current application.

As such, Applicants assert that Trokhan fails to teach each and every element of the claims.

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Additionally, the Office Action states that it would have been obvious "to form valley areas of the recited size since this would only involve a change in shape and/or size which is generally considered within ordinary skill in the art."

To establish a case of *prima facie* obviousness, the Office must show a motivation to modify the reference in the manner claimed and a reasonable expectation of success resulting from the combination and modification. This suggestion of the desirability of the modification must come from the teachings of the prior art itself and not from the Applicant's own disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). Obviousness, further, is based on the following factual inquiries: 1) determining the scope and contents of the prior art; 2) ascertaining the differences between the prior art and the claims in issue; 3) resolving the level of ordinary skill in the pertinent art; and 4) evaluating evidence of secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The Office has not established a *prima facie* case of obviousness because there is no evidence of the factual inquiries being made or of a motivation to modify the Trokhan reference in the manner necessary in order to arrive at the current claims.

As noted above, the foraminous member, as taught by Trokhan, would not result in the molded, textured, spunlaced nonwoven web of the current application. Furthermore, such a modification would destroy the intended purpose sought by Trokhan, namely the creation of an apertured web. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The Office Action has not put forth any motivation as to why one of ordinary skill in the art would modify the teachings of Trokhan to arrive at the nonwoven web of the current application.

As such, Applicants assert that Trokhan fails to teach or suggest each and every element of the claims.

Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103.

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Conclusion

This response represents an earnest effort to place the present application in proper form and to distinguish the invention as claimed from the applied reference. In view of the foregoing, reconsideration of this application and allowance of the pending claims are respectfully requested.

Respectfully submitted,

By



Sarah Ann Dressel

Registration No. 58,484

(513) 634-1452

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Customer No. 27752